

General Delivery and Packaging Specifications for suppliers of ebm-papst Landshut GmbH (epL)

1. Aim of the General Delivery and Packaging Specifications

These General Delivery and Packaging Specifications inform all our suppliers of our requirements, and set out their responsibilities. They provide a simple, practical guide, enabling smooth and efficient flow of material between suppliers and epL.

Non-compliance with these General Delivery and Packaging Specifications may result in a claim that impacts negatively on the supplier's evaluation. We also reserve the right to pass on to the Supplier any additional costs incurred as a result of non-compliance.

The Supplier must agree any deviation from these General Delivery and Packaging Specifications with epL expressly in writing. epL additionally reserves the right to agree item-specific packaging specifications with the Supplier.

2. Delivery address

Please refer to the details on our purchase orders with regard to the delivery and invoicing address.

3. Goods acceptance times

3.1. Logistics Center, Müller-Armack-Str. 5, 84034 Landshut

- Sunday 10 am to Friday 6 pm, continuously open in three-shift operation
- Deliveries as from the first pallet must be recorded in the Tradelink time window management (obtain access data from Logistics contact)
- **Attention:** Only ramp unloading from the back is possible! Goods must be accessible on the truck. Movement of third-party goods is excluded.

3.2. Liebigstrasse, 84030 Landshut

- Monday through Thursday: 6 am - 5 pm
- Friday: 6 am - 3 pm
- Deliveries as from the first pallet must be recorded in the Tradelink time window management (obtain access data from Logistics contact)

3.3. Hazardous goods warehouse, Hofmark-Aich-Str. 25, 84030 Landshut

- Monday through Friday: 8 am to 12 noon

General Delivery and Packaging Specifications for suppliers of ebm-papst Landshut GmbH (epL)

4. Packaging specifications

4.1. General packaging requirements

The selected packaging must meet the requirements of the packaged goods (sections 407 ff. of German Commercial Code HGB). It must be capable of withstanding the loads of the intended transport mode. This must also take into account the route and means of transport, as well as possible influencing factors such as weather and transshipment handling.

The sender shall be liable for any damages and expenses caused by packaging that does not meet the above requirements.

4.2. Specific packaging requirements

The transport packaging must ensure that the packing and loading units are adequately secured during shipping, handling and storage.

The following requirements must be met as a minimum to ensure deliveries fulfill the specified quality standard:

- The packaging must ensure that parts are protected against mechanical damage, dirt contamination and corrosion.
- Cardboard boxes must be sealed by adhesive tape rather than by metal clips.
- No metal straps are to be used for transport locks.
- Specified pallet dimensions (see section 4.5.1)
- Permissible maximum weights (see section 4.5.1)

4.3. ESD protective packaging

Appendix 1: Application instructions for ESD protection according to DIN EN 61340-5-3. The specifications of the applicable ebm-papst Group ESD control program also apply. (See extract in Appendix 1)

Type/Status: Standard, valid

4.4. Shipping hazardous goods and goods with use-by date

The regulations governing transport of hazardous goods and of limited quantities (LQs) must be observed. The Supplier shall be liable for any damages resulting from non-compliance with legal requirements. The use-by date of items with a limited shelf life must be indicated both on the delivery note and on the product itself.

4.5. Packaging

For all modes of shipping, adequate packaging must be selected, ensuring that the goods are safe for transport. The cost of any damage in transit that is not covered by the insurers due to insufficient packaging shall be borne by the Supplier. In the event of non-compliance with the agreed packaging, ebm-papst Landshut reserves the right to charge the Supplier for repacking costs plus the resulting handling costs, at a minimum rate of €150 per loading unit.

General Delivery and Packaging Specifications for suppliers of ebm-papst Landshut GmbH (epL)

4.5.1. Pallets

- All shipments must be delivered on undamaged Euro pallets in accordance with DIN EN 13698-1:2004-01 or single-use pallets with basic dimensions of 1200 x 800 x 114 mm, and must meet the exchange criteria according to EPAL (<http://www.EPAL-palette.org>)
- Alternative loading aids are permitted only for the delivery of long goods. For the delivery of long goods, the supplier must choose the load carriers and packaging in such a way that safe transport of the goods is guaranteed
- The maximum loading height, including pallet, is 2000 mm
- Maximum weight < total height 1100 mm = 950 kg
- Maximum weight > total height 1100 mm = 400 kg
- The total protrusion of the goods, including tilt, must be < 25 mm
- Pallets must be secured by straps; sheeting must be avoided
- If sheeting is essential, the fork clearance of the load carrier must be guaranteed
- Labels and other markings or documents must be fully bonded to the packaging at all corners
- All mixed pallets not obvious as being mixed must be marked uniformly as such (on the two short sides as a minimum)

4.5.2. Single-use packaging units

- Packaging must be marked with the recycling symbol so that it can be fed back into the material cycle after use
- All packaging units being transported must correspond to the outer dimensions of a Euro pallet (1200 x 800) mm
- The maximum height is variable, and limited only by the maximum height of a loaded pallet (see section 4.5.1)
- Maximum weight per container: 15 kg
- In special cases, epL will provide reusable packaging, which must be used as a binding requirement. Differing types of packaging must be approved by epL.

4.5.3. Reusable packaging units – blue ebm-papst boxes

- Each reusable packaging unit consists of a pallet, plastic containers, some with inserts, and a cover
- The reusable containers used by ebm-papst are based on the standard European pallet dimensions (1200 x 800 mm). All containers are marked with the lettering "ebm-papst"

General Delivery and Packaging Specifications for suppliers of ebm-papst Landshut GmbH (epL)

- If reusable packaging has been agreed, it will be provided to the Supplier free of charge, and remains the property of epL. It must be handled with care, and managed as an asset of value. It must not be used for purposes other than those intended. A charge shall be made for any misuse or loss.
- The quantity per container shall be specified by agreement between the Supplier and epL. The top level of containers must always be covered by a cover layer. Additional top layers must be supplied for the purpose, irrespective of the number of items being delivered
- Basic/maximum dimensions, maximum weight: see sections 4.5.1 and 4.5.2.
- In order to meet the high ebm-papst quality requirements, goods must not be shipped in damp, wet or soiled containers, or with damp, wet or soiled inserts.
- When reusing packaging, the Supplier must remove outdated and invalid markings and/or labels.
- Lacking reusable packaging must be requested in good time. If too few, or no, ebm-papst containers are available at time of shipping, permission to use different packaging must be obtained from the responsible employee in Production Planning.

4.5.4. Execution of transport packaging

- If an item consists of multiple parts, it must be packed completely in a single packaging unit (set packaging).
- Sufficient delivery volumes must be combined to form sorted loading units.
- Requirements for mixed pallets (with multiple different item numbers on one pallet):
 - Stack items comprising only one container, or just a few, on the top
 - Stack items with the same item number vertically, not next to each other
 - Mark as a mixed pallet on the two short sides
- Sample items must be delivered separately. The recipient must be clearly identifiable.

4.5.5. Mesh box pallets

- All shipments must be supplied in interchangeable mesh box pallets according to DIN 15155 – UIC 435-3, with outer dimensions 1240 x 835 x 970 mm, and must meet the exchange criteria according to EPAL (<https://gpal.EPAL-pallets.org>).

4.6. Marking on packaging units

Labeling requirements:


- The labeling requirement for ebm-papst Landshut is a 2D data matrix code as per the supplement to the VDA 4902 standard, Version 4.
- The quality of the codes is described in the respective VDA standard
- The data identifiers must be selected based on the underlying standard.
- The use-by date of items with a limited shelf life must be indicated on the product itself or on the packaging

General Delivery and Packaging Specifications for suppliers of ebm-papst Landshut GmbH (epL)

- The batch number must represent the smallest delivery container. The supplier code must be added at the end of the batch number
- When reusing packaging, outdated and invalid markings and/or labels must be removed.
- Higher requirements for marking packaging units may be agreed by epL with the Supplier.

4.6.1 Where there is sufficient space, the smallest delivery container must be marked in accordance with VDA standard 4994 (revised VDA standard 4902).

Label template to DIN 4994

<small>SHIP FROM</small> SUPPLIER AG PLANT BERLIN BERLIN DE-10117 ID 887766554 COUNTRY OF ORIGIN DE		<small>SHIP TO</small> CUSTOMER AG PLANT MUNICH INDUSTRIEPARK 13 DE-80888 MUENCHEN PLANT/UNLOADING POINT/INTERNAL DESTINATION 011 / ABLAD123 / LAGER				
<small>DELIVERY NOTE</small> 12345678 <small>SUPPLIER NUMBER</small> 987654321	<small>CUSTOMER SPECIFIC ROUTING</small> ROUTE 66 LINE 15		<small>ETA</small> 2016-01-15/13:30	<small>QUANTITY (PCE)</small> 1000	<small>NET KG</small> 780	<small>GROSS KG</small> 850
<small>CUSTOMER PART NUMBER</small> GFS-123-554-765		<small>BEFESTIGUNG XYZ ALUMINIUM</small>				
<small>PACKAGE ID (1:2)</small> UN 987654321 000123457 			<small>PACKAGING TYPE</small> 0009PAL <small>BATCH NUMBER</small> CH1234	<small>EXPIRY DATE</small> E 2018-01-14		
<small>SUPPLIER AREA</small>  Lieferanten Zeile 1 Lieferanten Zeile 2 Lieferanten Zeile 3		Kunden Zeile 1 Kunden Zeile 2 Kunden Zeile 3 Kunden Zeile 4 Kunden Zeile 5				
<small>Warenanhänger VDA 4994</small>		<small>created by www.my-VDA-Label.de</small>				

Beispiel: VDA 4994 GTL Label - VDA GTL Warenanhänger nach VDA 4994 im Format DIN A5

General Delivery and Packaging Specifications for suppliers of ebm-papst Landshut GmbH (epL)

Label template to DIN 4902

Beispiel: VDA 4902 Label - VDA Warenanhänger nach VDA 4902 im Format DIN A5

Phoenix-Strabe 47 11 12345 Musterdorf		Tel. 999999	
(3) Lieferschein-Nr. / Advice note no. (N) 2581752 		(4) Lieferantenanschrift / Supplier address my-VDA-Label, Musterplatz, 12345 Musterdorf	
		(5) Gewicht netto / net weight 370 KG	(6) Gewicht brutto / gross weight 400 KG
		(7) Anzahl Packstücke / No. of boxes 1	
(8) Sach-Nr. Kunde / Part no. (P) 765-HGD89-123 			
(9) Füllmenge / Quantity (Q) 140 		(10) Bezeichnung, Lieferung, Leistung / Description Geblaese	
		(11.1) Sach-Nr. Lieferant / Supplier part no. (305) 0-123B10-0 	
(12) Lieferanten-Nr. / Supplier no. (V) 4638141 		(11.2) PM-Ident-Nr. / Package reference no. (B) 6099012 	
(15) Packstück-Nr. / Serial no. (S) 258175201 		(13) Datum / Date D 160417	(14) Änderungsstand Konstruktion / E. change A43-275 XL
		(16) Chargen-Nr. / batch no. (R)  C123	

(17) my-VDA-Label, Musterplatz, 12345 Musterdorf Warenanhänger VDA 4902

Beispiel: VDA 4902 Label - VDA Warenanhänger nach VDA 4902 im Format DIN A5

4.6.2 Contrary to section 4.6.1, where there is insufficient space on a delivery container a label according to VDA 4992 may be used.

Label template to DIN 4992 78 x 45 mm



Part No.: **9242000788000** Index: 01
 Quantity: **1000**
 Ordering Code: **CKG57NX7R2E225MT0Y9W**
 Add. Info:
 Part Name: **Ceramic Capacitor 250V, 2.2uF**
 Package-ID: **UN340806311520214310501**

1. Batch: **XI15FA0003** Prod.-Date: **20150707**
 2. Batch: **XI16FB0003** Expiry Date: **20190706**
 Supplier-ID: **171581** Supplier: **Sample & Co**
 Order Number: **6100043881** Delivery Note: **801909601**
 Man. Part-No.: **CKG57NX7R2E225MT0Y9W**
 Man. Location: **CH-BEIJING**
 Supplier-Data: **Warehouse 5, Dock 4A**

General Delivery and Packaging Specifications for suppliers of ebm-papst Landshut GmbH (epL)

Create label template to DIN 4992 50 x 20 mm



Part No.: **9242000788000**
 Quantity: **1000** Index: 01
 1. Batch: XI15FA0003
 2. Batch: XI16FB0003
 Expiry Date: 20190706
 Supplier-ID: 171581

Package-ID: UN340806311520214310501

Beispiel: VDA 4992 MAT Label - VDA MAT Label nach VDA 4992 Spezifikation - Version Small

4.7. Delivery note

An original delivery note must be enclosed with each shipment. The delivery note must be attached in a clearly visible place on the front of the package using a delivery note bag. If a shipment consists of multiple packages or pallets, each load carrier must be listed on the delivery note with its contents.

The following order details must be indicated on the delivery note:

- Supplier, address
- Delivery note number
- epL order number
- Delivery advice number (can be obtained from supplier portal)
- epL material number with revision status
- Item designation
- The use-by date of items with a limited shelf life must be indicated
- Delivery quantity
- Partial deliveries must be indicated on the delivery note

5. Exemptions

Any necessary deviation from these General Delivery and Packaging Specifications based on specific packaging requirements requires consultation with, and written approval from, the epL Logistics and Production Planning departments.

Appendix 1 - ESD protective packaging

Protective packaging for Electrostatic Sensitive Devices (ESDs) and the marking on it must correspond to the purchase orders, drawings or other documents. If the purchase order, drawing or other documentation agreed with the supplier does not stipulate ESD protective packaging, the supplier must specify requirements for ESD protective packaging in accordance with DIN EN 61340-5-3:2016-04 in its planning. If necessary, the packaging must be specified for all material movements within the Electrostatic Protected Area (EPA), between different EPAs, between workplaces, for service activities, and for deliveries to ebm-papst.

Transporting ESDs outside an EPA requires packaging that protects against electrostatic hazards – that is, ESD protective packaging that both:

- ensures protection in case of direct contact with the ESDs, conductive material;
- provides a structure that ensures screening against electrostatic discharge.

Consequently, only screening ESD protection packaging should be used here.

Depending on requirements, the metallized or conductive materials may have a surface or volume resistance of **< 1 x 10³ Ω**.

ESD packaging must be marked clearly with the ESD warning sign. Accompanying documents must be attached outside the packaging, and must not have any contact with the ESDs.

Classification of ESD protective packaging according to DIN EN 61340-5-3

Classification	Description	Limits
Conductive	Surface/volume resistance	< 1 x 10 ⁴ Ω
Discharging	Surface/volume resistance	≥ 1 x 10 ⁴ Ω to < 1 x 10 ¹¹ Ω
Insulating	Surface/volume resistance	≥ 1 x 10 ¹¹ Ω
Screening effect	Surface/volume resistance	< 1 x 10 ³ Ω
	and protection against electrostatic discharge	< 50 nJ